

## SURFACE COMPRESSION BASED ON REFERENCE GEOMETRY IN ANIMATION MODELS

### Abstract of the Disclosure

[0070] A compression system and method compresses three dimensional animation models. The system and method compresses an offset model, representative of a frame in an animation sequence with respect to a reference model from a reference frame of the sequence. The offset model is compressed by predicting the locations of offset vertices on the surfaces of the model based on the local geometry of reference vertices of the reference model. The offset vertex position is subtracted from the predicted position, and the difference is stored in a compressed data file. The prediction differences are easily compressed by any data compressor because the differences are generally small numbers.